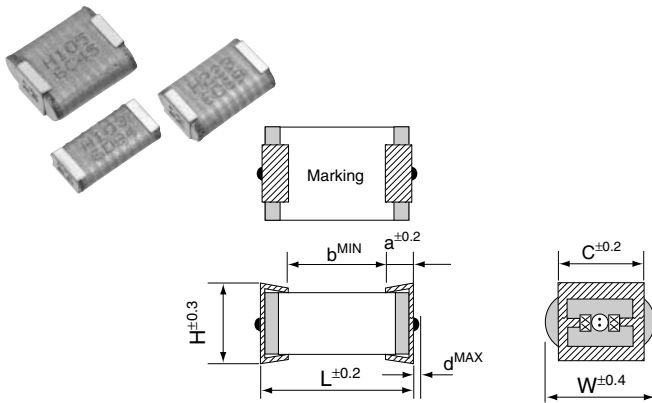


## MML-F Series (For SMD Metallized Polyester Film Capacitors)

- Large-capacity, high-voltage capacitors applying the case-less type technology for Model MML-E and using polyester film
- Suited for DSU-type terminal adaptors and other communications equipment (products for voltage ratings 100V. DC through 160V. DC)
- Suited for SSRs and other power circuits requiring high voltage (products for voltage rating 630V. DC)

### Outline of drawings and dimensions



Product symbol : (Example) MML-F Series 630V DC 0.022μF±10%

**MML-F-2J-223 K T F**

- Type of series
- Rated voltage code
- Capacitance code
- Capacitance tolerance code
- Packing method code
- Lead free terminal code

For the taping of Model MML-F, see page 103.

### Voltage ratings 100V. DC and 160V. DC

#### Product specifications

Item	Specification
Operating temperature range	-40°C ~ +85°C (+105°C, with derating over 85°C)
Rated voltage	100,160V.DC
Permissible capacitance	±5% (J), ±10% (K)
Dielectric dissipation factor	0.7% or less (20°C,1kHz)
Withstand voltage	Rated voltage(V.DC) ×1.5, one min.
Insulation resistance	1,000 / C <sub>R</sub> MΩ or more
Resistance to solder heat	Reflow : peak 220°C, 5 seconds or less (Capacitor surface)

C<sub>R</sub> : Capacitance ( μF)

### Voltage ratings 630V. DC

#### Product specifications

Item	Specification
Operating temperature range	-40°C ~ +85°C (+105°C, with derating over 85°C)
Rated voltage	630V.DC
Permissible capacitance	±5% (J), ±10% (K)
Dielectric dissipation factor	0.7% or less (20°C,1kHz)
Withstand voltage	Rated voltage(V.DC) ×1.5, one min.
Insulation resistance	15,000 MΩ or more
Resistance to solder heat	Reflow : peak 220°C, 5 seconds or less (Capacitor surface)

For soldering conditions for SMD capacitors, refer to page 100 and 101.

### Standard value and case size

(Unit : mm)

Voltage rating (V.DC)	Capacitance		Dimensions						
	(μF)	Code	H	W	L	a	b	c	d
100	0.47	2A-474	3.5	5.9	7.4	1.2	4.3	4.3	0.3
100	1.0	2A-105	3.5	7.5	10.4	1.2	7.3	4.3	0.3
160	1.0	2C-105	4.5	8.9	10.4	1.2	7.3	4.3	0.3
630	0.010	2J-103	2.5	5.4	10.4	1.2	7.3	4.3	0.3
630	0.015	2J-153	3.5	6.2	10.4	1.2	7.3	4.3	0.3
630	0.022	2J-223	3.5	7.0	10.4	1.2	7.3	4.3	0.3
630	0.033	2J-333	4.5	7.8	10.4	1.2	7.3	4.3	0.3

For ratings not covered in the table, consult Hitachi AIC.